

IN THE CLAIMS:

1. (Currently Amended) A golf ball having the diameter D of 43.0 mm or greater and 50.0 mm or less, which comprises a core and a cover having the specific gravity of 1.05 or greater and 1.50 or less, with the moment of inertia of said golf ball being equal to or greater than 92 85.0 gcm<sup>2</sup>.

2. (Cancelled)

3. (Currently Amended) The golf ball according to claim 1 wherein the moment of inertia is equal to or greater than the value Y calculated by the following mathematical formula (I) where Y is equal to or greater than 92:

$$Y = 3.57 \cdot D - 68.6 \quad (I).$$

4. (Cancelled)

5. (Previously Presented) The golf ball according to claim 1 wherein the diameter D is 43.5 mm or greater and 48.0 mm or less.

6. (Previously Presented) The golf ball according to claim 1 wherein the diameter D is 44.0 mm or greater and 47.0 mm or less.

7. (Previously Presented) The golf ball according to claim 1 wherein the specific gravity is 1.10 or greater and 1.45 or less.

8. (Previously Presented) The golf ball according to claim 1 wherein the specific gravity is 1.15 or greater and 1.40 or less.

9. (Currently Amended) The golf ball according to claim 1 wherein the moment of inertia is ~~equal to or greater than 86.0 gcm<sup>2</sup>~~ and equal to or less than 150 gcm<sup>2</sup>.

10. (Currently Amended) The golf ball according to claim 1 wherein the moment of inertia is ~~equal to or greater than 88.0 gcm<sup>2</sup>~~ and equal to or less than 130 gcm<sup>2</sup>.

11. (Currently Amended) The golf ball according to claim 5 wherein the moment of inertia is equal to or greater than the value Y calculated by the following mathematical formula (I) where Y is equal to or greater than 92:

$$Y = 3.57 \cdot D - 68.6 \quad (I).$$

12. (Currently Amended) The golf ball according to claim 6 wherein the moment of inertia is equal to or greater than the value

Appl. No. 10/622,568

Y calculated by the following mathematical formula (I) where Y is equal to or greater than 92:

$$Y = 3.57 \cdot D - 68.6 \quad (I).$$